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Donald J. Stavely

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EXAMINER

TRAN, NHAN T

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/623,214	STAVELY ET AL.	
	Examiner	Art Unit	
	Nhan T. Tran	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. Information disclosure statement (IDS) submitted on 7/18/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

2. Claims 16, 26, 28 and 34 are objected to because of the following informalities:

Regarding claim 16, the limitation of "the making of a video recording." should be corrected as -- making of a video recording --.

Regarding claims 26 & 28, each of claims 26 and 28 recites separate steps but having the same step letters a) and b) with steps a) and b) of the independent claim 21. Thus, these steps a) and b) of claims 26 & 28 should be corrected, i.e., steps e) and f), to provide proper step orders to avoid confusion.

Regarding claim 34, in step d) of claim 34, the limitations of "the second wireless signal indicating that a photograph is to be taken and the location in the field of view of the selected portion." should be corrected to read as -- the second wireless signal indicating a photograph to be taken and the location in the field of view of the selected portion. -- or -- the second wireless signal indicating that a photograph is to be taken and the location is the field of view of the selected portion. --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7-9, 11-21 & 25-34 are rejected under 35 U.S.C. 102(e) as being anticipated by lida et al. (US 7,057,643 B2).

Regarding claim 1, lida et al. (hereafter referred as "lida") discloses a photography system (Figs. 1-5, col. 1, lines 11-15) comprising:

a digital camera (digital still or video camera 1, Figs. 1-3, col. 3, lines 59-65);
a remote control (portable phone 3, Figs. 1 & 4) that communicates wirelessly (via antenna 33) with the digital camera (col. 4, lines 7-17 and col. 5, lines 33-46), the remote control having a display (display 32, Figs. 1, 9-12, 14 & 15) and having controls (a four-way operational section 31 and other buttons, Fig. 1) that cause the system to perform digital framing (Figs. 9 & 10 or Figs. 14 & 15) that selects a region from a field of view of the camera (see col. 8, lines 18-63 or col. 10, line 21 – col. 11, line 26, wherein a camera's field of view is selected by moving pan, tilt and/or zoom bars 402, 412, 421 shown in Figs. 9 & 10 or moving a frame 600, 601 shown in Figs. 14 & 15

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using a digital image frame output from the digital camera as a real-time digital reference frame. It is noted that "digital framing" is realized by a digital image frame captured by the digital camera 2 corresponding to the selected region and is used as a real-time reference image in the graphical user interface (GUI) of the portable phone 3 for further controlling the camera's field of view as disclosed in col. 4, line 51 – col. 5, line 12 and col. 6, line 40 – col. 7, line 9), and wherein the display displays an image of a scene encompassed by the selected region (see Fig. 10 or Fig. 15, col. 8, line 64 – col. 9, line 14; col. 11, lines 20-26 in which the scene corresponding to the selected region, i.e., the scene including a person shown in Fig. 10, is displayed on the display 32 after framing operation is performed).

Regarding claim 2, lida discloses that the selected region includes the entire field of view of the camera. See Fig. 10 or Fig. 15. Note that the entire field of view of the camera is considered as the entire image illustrated by Fig. 10 or Fig. 15 **at that moment** corresponding to the selected region. In another interpretation, the entire field of view of the camera in this claim is considered as the entire field of view of the camera in the zoom mode. Thus, the entire field of view of the camera is obtained in the zoom mode when maximum zoom-out is selected.

Regarding claim 3, it is also seen in lida that the selected region includes a portion of the field of view of the camera (a person in the scene shown in Fig. 10 or Fig.

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15). In another interpretation, a portion of the field of view of the camera is obtained in the zoom mode when a zoom-in is selected.

Regarding claim 7, lida further discloses in Figs. 1, 9 & 10 that the image of the scene encompassed by the selected region (Fig. 10 or Fig. 15) is displayed repetitively on the display 32 of the portable phone 3 because the display 32 must repetitively refresh the displayed image in compliance with scanning frequency of the display (i.e., 60Hz, 50Hz, etc.) to constantly display a visual image as shown regardless still image or motion images.

Regarding claim 8, lida clearly discloses that the camera can record still images (Figs 2 & 3, col. 3, lines 61-65 and col. 4, lines 51-59 in which the digital camera is a digital still camera that can record still images into memory 28 in response to recording instruction command sent from the portable phone).

Regarding claim 9, lida clearly discloses that the camera can take video recordings (Figs. 2 & 3, col. 3, lines 61-65 and col. 4, lines 51-59 in which the digital camera is a digital movie camera that can record video images into memory 28 in response to recording instruction command sent from the portable phone).

Regarding claims 11 & 12, lida discloses that the remote control communicates wirelessly with the camera using radio signals, wherein the radio signals have

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frequencies between 2.4 and 2.4835 gigahertz (Bluetooth range). See col. 12, lines 50-55, and note that the Bluetooth radio frequencies are inherently between 2.4 to 2.4835 gigahertz (GHz).

Regarding claim 13, also disclosed by lida is that the digital camera comprises a zoom lens (Fig. 2, zoom lens 210, col. 4, lines 19-20), wherein the zoom lens is configured to a relatively short focal length (when the zoom lens 210 is at wide angle position known as maximum zoom-out position). Note that since the zoom lens 210 inherently has two focal lengths corresponding to a maximum zoom-in position (long focal length) and a maximum zoom-out position (short focal length), the short focal length is always relatively short compared to the long focal length of the same zoom lens 210.

Regarding claim 14, lida further discloses that the remote control (portable phone 3) comprises a control (recording instruction command) that causes the camera to take a photograph (see col. 4, lines 51-59).

Regarding claim 15, as analyzed in claims 1 & 14, the photograph is of the scene encompassed by the selection region (i.e., a person shown in Fig. 10 corresponding to the selected pan, tilt and/or zoom region). See also col. 4, lines 51-59.

Regarding claim 16, lida also discloses that the remote control further comprises controls (recording instruction commands) that cause the digital camera to start and stop the making of a video recording. See col. 3, lines 61-65 and col. 4, lines 56-59, wherein that the camera 2 is a movie camera, and the camera only records video into the camera's memory in response to the recording instruction commands from the portable phone 3. Thus, "start and stop making of a video recording" is inherently included in the recording instruction commands for the digital camera to record only the scene that the user desires in order for the photography system of lida to function as disclosed.

Regarding claim 17, as analyzed in claims 1 & 9, the video recording is of the scene encompassed by the selected region (i.e., a person shown in Fig. 10 corresponding to the selected pan, tilt and/or zoom region). See col. 3, lines 61-65 and col. 4, lines 51-59.

Regarding claim 18, lida discloses in Figs. 9 & 10 or Fig. 14 & 15; col. 3, lines 61-65; col. 4, lines 51-59 and col. 7, lines 5-8 that the digital framing can be performed during the making of a video recording (the digital framing is performed in real-time during entire video session).

Regarding claim 19, it is clearly seen in lida, Figs. 1-3 & 6, col. 4, lines 46-63 and col. 6, line 20 – col. 7, line 8 that the digital framing is performed in the digital camera.

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Note that the digital camera 2 performs the digital framing by capturing, reading out image frame from the CCD 220 after driving the zoom lens 210 and/or pan, tilt angles of the digital camera, the image frame is converted into a digital image frame and processed as a digital framing by image processing section 250 to add view position data before transmitting to the portable phone.

Regarding claim 20, it is also clearly seen in lida, Figs. 4, 5, 7-10, col. 7, line 10 – col. 9, line 14 that the digital framing is performed in the remote control (the portable phone 3) by receiving the digital image frame from the digital camera and manipulating the digital image frame by image processing section 340 (Fig. 5) to add indicators for pan, tilt and zoom positions as view/target position data, and then displaying as shown in Figs. 9 & 10 or Figs. 14 & 15. Also see col. 11, lines 40-44.

Regarding claim 21, lida discloses a method of photography, comprising the steps of:

a) transmitting a first wireless signal (Figs. 1 & 7, step S24) from a remote control (3) to a digital camera (2) (see col. 7, lines 35-45; col. 6, lines 51-60 and col. 4, lines 56-63, and note that wireless signal includes optical command and/or recording instruction command);

b) performing digital framing in the digital camera in response to the wireless signal (digital framing is performed by capturing a digital image frame and adding view position data in the digital camera at steps S16 & S17 in Fig. 6 after driving pan, tilt

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and/or zoom mechanism sections in step S14), selecting a region (by driving pan, tilt and/or zoom mechanism sections to corresponding positions at step S14 and capturing a digital image frame) from a field of view of the digital camera (see col. 4, lines 47-63 and col. 6, lines 20-60);

c) transmitting a second wireless signal (Fig. 6, step S18) from the digital camera to the remote control, the second wireless signal containing information (image data and view position data) about a scene encompassed by the selected region (see col. 6, line 51 – col. 7, line 8 in which the digital camera transmits the digital image frame corresponding selected pan, tilt and/or zoom region along with the view position data to the portable phone 3);

d) displaying (Figs. 7 & 8, steps S27 and S204 & S205), on a display (32) on the remote control, a representation of the scene encompassed by the selected region (see Fig. 10 or Fig. 15; col. 7, line 51 – col. 8, line 11 in which selected region of a scene, i.e., the image of a person, is displayed on the portable phone's display 32).

Regarding claim 25, see the analyses of claims 11 & 12, wherein wireless signals are transmitted using Bluetooth radio signals.

Regarding claim 26, lida further discloses the steps of transmitting a third wireless signal (recording instruction command via antenna 33) from the remote control to the digital camera; and taking a photograph in response to the third wireless signal. See col. 4, lines 51-59 and col. 3, lines 61-65. It is noted that a photograph (a still

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image) is taken (recorded into camera's memory 28) when the user is satisfied with the image of the scene after selecting the camera's field of view. Thus, "third wireless signal" is equated as the "recording instruction command" sent from the portable phone to the digital camera for recording the still image.

Regarding claim 27, see the analysis of claim 15.

Regarding claim 28, lida further discloses the steps of transmitting a third wireless signal (recording instruction command via antenna 33) from the remote control to the digital camera; and making a video recording in response to the third wireless signal. See col. 4, lines 51-59 and col. 3, line 61 – col. 4, line 3. It is noted that the camera 2 is digital video camera which records video into memory 28 when the user is satisfied with the video of the scene after selecting the camera's field of view. Thus, "third wireless signal" is equated as the "recording instruction command" sent from the portable phone to the digital camera for recording video.

Regarding claim 29, see the analysis of claim 17.

Regarding claims 30 & 31, see the analyses of claims 2 & 3, respectively.

Regarding claim 32, see the analysis of claim 13.

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Regarding claim 33, lida discloses a photography system, comprising:

means (communication sections 252 & 342 including antennas 24 & 33 shown in Figs. 1, 3 & 5) for wirelessly communicating between a remote control (portable phone 3) and a digital camera (digital camera 2) (see col. 4, lines 4-13);

means (camera's components shown in Figs. 2 & 3) for performing digital framing in the digital camera in response to the wireless signals from the remote control (see col. 4, lines 47-63 and col. 6, lines 40-60, note the Examiner's comments in claim 21 in which, in response to framing commands from the portable phone 3 to select a field of view of the camera, the camera performs digital framing by capturing a digital image frame and adding view position data after driving zoom lens and/or pan/tilt angles to corresponding positions);

means (display 32 in combination with CPU, RAM & ROM of the portable phone shown in Figs. 4 & 5) for displaying on the remote control a representation of a scene (Fig. 10 or Fig. 15) encompassed by a selected portion of a field of view of the camera (see col. 8, line 51 – col. 9, line 14 or col. 11, lines 14-45).

Regarding claim 34, lida discloses a method of photography, comprising the steps of:

a) transmitting a first wireless signal (Fig. 6, steps S15-S18) from a digital camera (digital camera 2) to a remote control (portable phone 3), the first wireless signal containing information (digital image data and view position data) about a scene

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encompassed by a field of view of the digital camera (Fig. 9 or Fig. 14; col. 6, line 44 – col. 7, line 8);

b) performing digital framing (Figs. 9 & 10 or Figs. 14 & 15) in the remote control in response to controls on the remote control (see Figs. 7 & 8 or Fig. 13; col. 7, line 45 – col. 8, line 63 or col. 10, line 20 – col. 11, line 51, wherein the portable phone 3 performs digital framing by receiving the digital image from the digital camera, processing the digital image to include view/target position data and displaying the digital image along with view/target position data as a live-view digital framing on the display 32);

c) displaying, on a display (32) on the remote control, a selected region of the field of view that results from the digital framing (see Figs. 9 & 10 or Figs. 14 & 15; col. 8, line 59 – col. 9, line 14 or col. 11, lines 2-51 in which a selected region of field of view is displayed as a target image with position data);

d) transmitting a second wireless signal (recording instruction command via antenna 33) from the remote control (3) to the digital camera (2), the second wireless signal indicating [that] a photograph (a still image) [is] to be taken and the location in the field of view of the selected portion. See col. 3, lines 61-65 and col. 4, lines 51-59. It is noted that a photograph (a still image) is taken by recording into camera's memory 28 when the user is satisfied with the image of the scene after selecting the camera's field of view. Thus, "a second wireless signal" is equated as the "recording instruction command" sent from the portable phone to the digital camera for recording the still image.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-6 & 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iida et al. (US 7,057,643 B2) in view of Kenoyer (US 2003/0174146 A1).

Regarding claims 4-6, although Iida discloses digital framing as analyzed in claim 1 by capturing and processing a digital image frame of a scene for displaying and/or recording while mechanically driving pan, tilt and/or zoom sections of the digital camera, Iida *does not* teach that the digital framing *includes* digital pan, digital tilt, and digital zoom functions which are understood as using image signals from a subset of pixels or all pixels of an image sensor or a memory. However, Iida suggests that the photography system *may be modified in various ways without limited to disclosed embodiments* (Iida, col. 12, lines 37-40), and the drivable range of the camera may be contained in various data transmitted from the camera to the remote control (Iida, col. 13, lines 4-7).

In the reference to **Kenoyer**, a remote-controlled camera system having a digital pan, digital tilt and digital zoom functions is taught. According to **Kenoyer**, digital pan (Fig. 4B), digital tilt (Fig. 4C) and digital zoom (Fig. 4D) functions are performed by

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reading out image signals corresponding to a subset of pixels or all pixels of an image sensor (304 or 504) or a memory (518, 520) and converting the image signals into digital image frame to effectuate digital pan, digital tilt and digital zoom functions in response to a user's command sent from a remote device (Kenoyer, Figs. 6-8, paragraphs [0037]-[0039], [0045] and [0058]). **Kenoyer** clearly suggests that the digital camera may be constructed with both zoom modes of electro-mechanical zoom and digital zoom functions *to enhance the zoom capabilities of the digital camera* (Kenoyer, paragraph [0036]), and also constructed with digital pan and digital tilt functions to replace electro-mechanical pan and tilt functions to reduce camera's manufacture cost and increase the camera's reliability while providing quicker response to user's commands (see Kenoyer, paragraphs [0012]-[0013] & [0016]-[0017]). **Kenoyer** further suggests the camera system can be used for general photography purposes without limited to a specific application (Kenoyer, paragraph [0067]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the photography system of Iida to include the digital zoom function to enhance zooming capabilities of the digital camera while replacing the electro-mechanical pan and tilt functions with digital pan and digital tilt functions so as to reduce camera's manufacture cost and increase the camera's reliability while providing quicker response to user's commands as suggested by Kenoyer.

Regarding claims 22-24, these method claims have limitations corresponding to apparatus claims 4-6. Therefore, these claims are also met by the analyses of claims 4-6, respectively.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over lida et al. (US 7,057,643 B2) in view of Udagawa (US 6,519,000 B1).

Regarding claim 10, lida teaches that the digital camera 2 can be a digital still camera or a digital video camera (see claims 8 & 9 and lida, col. 3, lines 61-65). Although lida discloses digital still camera having a motion picture capturing function as a live-view (only for displaying as an electronic view-finder, col. 4, lines 1-3), lida does not explicitly teach that the digital camera can record video in addition to recording still images.

As taught by **Udagawa** in Fig. 1, a digital camera can record high-resolution still images into memory (17) in a still image mode (D_A) and can also record video into the memory (17) in movie modes (D_B or D_C). See Udagawa, col. 5, line 45 – col. 6, line 9.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the digital camera of lida in view of the teaching of Udagawa for recording both still images and video into the camera's memory so as to improve camera's functionality and provide user convenience during photography session without having to carry two different kinds of cameras.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chiang (US 6,809,759 B1) discloses a remote control unit with previewing device for controlling a digital camera.

Kurosawa et al. (US 6,822,676 B1) discloses a camera control system with electronic zoom processing.

Alten (US 2002/0005907 A1) discloses a remote control unit with visual display device for cameras and video recorders.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NHAN T. TRAN
Patent Examiner